REMARKS

I. Introduction

At the time of the Office Action dated April 10, 2006, claims 1 and 4-6 were pending in this application. In this Amendment, claims 1 and 4-6 have been amended, and new claims 8-11 have been added. Care has been exercised to avoid the introduction of new matter. Adequate descriptive support for the amendment can be found in, for example, Table 1 at page 5, the first full paragraph at page 6, Table 2 at page 10, Table 3 at page 12 and the second full paragraph at page 15 of the specification. Now, claims 1, 4-6 and 8-11 are active in this application.

It is noted that the claim for foreign priority and receipt of the certified copies of the priority document filed March 31, 2005, through the International Bureau, have not been acknowledged. Applicant hereby respectfully requests that the Examiner clarify the record by acknowledging the claim for foreign priority and receipt of the certified copies of the priority documents.

II. The Rejection of Claims 1

Claim 1 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Yamamoto et al. in view of Estival et al. In the statement of the rejection, the Examiner asserted that the applied combination of Yamamoto et al. and Estival et al. teaches a magnetic element including all the limitations recited in claim 1.

Claim 1 has been amended to recite "main ingredients of the mixed powder including...; and 41 to 55 mol % of cobalt oxide when converted to CoO." The applied combination does not teach, at minimum, the above amount of cobalt oxide in the mixed powder.

As admitted by the Examiner, Yamamoto et al. does not teach the main ingredients of the mixed powder recited in claim 1. Estival et al. teaches that magnetic ferrite includes 0.7-1.5 mol % of CoO. In contrast, the claimed main ingredients of the mixed powder include 41 to 55 mol % of cobalt oxide, which is not within the range taught by Estival et al.

As performance of magnetic ferrite is dependent on its composition, the magnetic ferrite of Estival et al. cannot achieve the same level of performance of the magnetic element of claim 1. According to the magnetic element of claim 1, a Q value becomes maximum at no less than 2 GHz. In addition, inductance at 2 GHz becomes no less than 3 nH as magnetic permeability μ' of the magnetic ferrite used is larger. This indicates a significant improvement in that characteristics for inductance elements used in high frequency circuits. Estival et al. does not teach the above exemplary benefits.

Accordingly, Yamamoto et al. and Estival et al., either individually or in combination, do not disclose or teach a magnetic element including all the limitations recited in claim 1. Withdrawal of the rejection of claim 1 under 35 U.S.C. §103(a) is, therefore, respectfully solicited.

III. The Rejection of Claims 4

Claim 4 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Takayama et al. in view of Estival et al. In the statement of the rejection, the Examiner asserted that the applied combination of Takayama et al. and Estival et al. teaches an impedance element including all the limitations recited in claim 4.

Claim 4 has been amended to recite "main ingredients of the mixed powder including...; and 41 to 55 mol % of cobalt oxide when converted to CoO." The applied combination does not teach, at minimum, the above amount of cobalt oxide in the mixed powder.

As admitted by the Examiner, Takayama et al. does not teach the main ingredients of the mixed powder recited in claim 4. Estival et al. teaches that magnetic ferrite includes 0.7-1.5 mol % of CoO. In contrast, the claimed main ingredients of the mixed powder include 41 to 55 mol % of cobalt oxide, which is not within the range taught by Estival et al.

An impedance element of claim 4 can obtain a cut-off frequency of no less than 1.2 GHz. Due to the high magnetic permeability μ' of magnetic ferrite of the present invention, the high impedance value (no less than 81 Ω) can be designed. This provides a superior impedance element. Estival et al. does not teach the above exemplary benefits of the present invention.

Accordingly, Takayama et al. and Estival et al., either individually or in combination, do not disclose or teach an impedance element including all the limitations recited in claim 4. Applicant, therefore, respectfully solicits withdrawal of the rejection of claim 4 under 35 U.S.C. §103(a), and favorable consideration thereof.

IV. The Rejection of Claims 5

Claim 5 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Ito et al. in view of Estival et al. In the statement of the rejection, the Examiner asserted that the applied combination of Ito et al. and Estival et al. teaches a common-mode noise filter including all the limitations recited in claim 5.

In response, claim 5 has been amended to recite "main ingredients of the mixed powder including...; and 41 to 55 mol % of cobalt oxide when converted to CoO." The applied combination does not teach, at minimum, the above amount of cobalt oxide in the mixed powder.

Ito et al. does not teach the main ingredients of the mixed powder recited in claim 5 as admitted by the Examiner, though Estival et al. teaches that magnetic ferrite includes 0.7-1.5 mol % of CoO. In contrast, the claimed main ingredients of the mixed powder include 41 to 55 mol % of cobalt oxide, which is not within the range taught by Estival et al.

By using a ring-shaped core of claim 5, a common-mode noise filter can be used as a filter in the GHz band because the ring-shared core has a coupling coefficient which is no less than 0.76. Estival et al. does not teach such an exemplary benefit of the present invention.

Accordingly, Ito et al. and Estival et al., either individually or in combination, do not disclose or teach a common-mode noise filter including all the limitations recited in claim 5. Applicant, therefore, respectfully solicits withdrawal of the rejection of claim 5 under 35 U.S.C. §103(a), and favorable consideration thereof.

V. The Rejection of Claims 6

Claim 6 has been rejected under 35 U.S.C. §103(a) as being unpatentable over So in view of Estival et al. In the statement of the rejection, the Examiner asserted that the applied combination of So and Estival et al. teaches an antenna element including all the limitations recited in claim 6.

In response, claim 6 has been amended to recite "main ingredients of the mixed powder including...; and 41 to 55 mol % of cobalt oxide when converted to CoO." The applied combination does not teach, at minimum, the above amount of cobalt oxide in the mixed powder.

So does not teach the main ingredients of the mixed powder recited in claim 6 as admitted by the Examiner, though Estival et al. teaches that magnetic ferrite includes 0.7-1.5 mol % of CoO. In contrast, the claimed main ingredients of the mixed powder include 41 to 55 mol % of cobalt oxide, which is not within the range taught by Estival et al.

By using a cylindrical core of claim 6, an antenna can be used in a GHz band as radiation loss is no less than -2.0dB. Estival et al. does not teach such an exemplary benefit of the present invention.

Accordingly, So and Estival et al., either individually or in combination, do not disclose or teach a magnetic element including all the limitations recited in claim 6. Applicant, therefore, respectfully solicits withdrawal of the rejection of claim 6 under 35 U.S.C. §103(a), and favorable consideration thereof.

VI. New Claims 8-11

Applicant notes that new claims 8-11 are patentably distinguishable over the cited references at least because these claims respectively include all the limitations recited in independent claims 1 and 4-6. Favorable consideration is, therefore, respectfully solicited.

VII. Conclusion

It should, therefore, be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Michael E. Fogarty
Registration No. 36,139

Please recognize our Customer No. 20277 as our correspondence address.

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 MEF:TT
Facsimile: 202.756.8087
Date: July 10, 2006